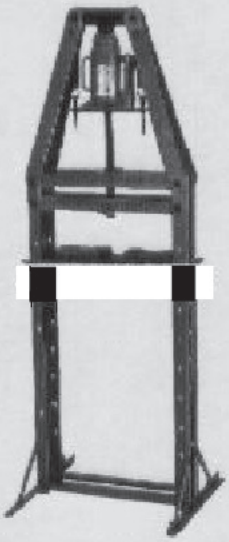
CENTRAL HYDRAULICS®

12 TON A-FRAME SHOP PRESS

Model 01667



Distributed Exclusively by

HARBOR FREIGHT TOOLS®

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For technical questions and replacement parts, please call 1-800-444-3353.

SAVE THIS MANUAL

You will need this manual for the safety instructions, assembly and operating instructions and parts list. Put it in a safe, dry place for future reference.

READ ALL INSTRUCTIONS BEFORE ASSEMBLING OR OPERATING THE SHOP PRESS.

SAFETY WARNINGS & CAUTIONS

1. KEEP WORK AREA CLEAN. Cluttered areas invite injuries.

2. KEEP CHILDREN AWAY. All children should be kept away from the work area. Don't let them handle tool.

3. DO NOT ASSEMBLE OR OPERATE THE PRESS IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to assemble or operate.

4. AVOID MOVING PARTS DURING OPERATION. Keep fingers and hands away from all moving parts.

5. USE EYE PROTECTION. Wear ANSI approved impact safety goggles. Goggles are available from Harbor Freight Tools.

6. DRESS SAFELY: Protective, gloves and non-skid footwear or safety shoes are recommended when working with and operating the Press. Don't wear loose clothing or jewelry. They can get caught in moving parts. Also, wear a protective hair covering to prevent long hair from getting caught in the Press.

7. DON'T OVERREACH. Keep proper footing and balance at all times.

8. DO NOT COMPRESS SPRINGS. Do not press items that could disengage and cause a potential hazard.

9. STAY ALERT. Watch what you are doing. Use common sense. Do not operate any tool when you are tired.

10. 12 TON LIMIT. Do not operate the hydraulic jack beyond rated capacity.

11. BOLT PRESS TO FLOOR. When press is used on bulky or unstable items, bolt Press to floor.

12. REPLACEMENT PARTS AND ACCESSORIES. When servicing, use only identical replacement parts. Only use accessories intended for use with this Shop Press. Approved accesso-

ries are available from Harbor Freight Tools.

13. STORE IDLE EQUIPMENT. When not in use, Shop Press should be stored in "closed" position and in a dry location to reduce rust. For safety, store the Shop Press in a locked cabinet, out of reach of children.

UNPACKING

When unpacking the Shop Press, check to make sure the following parts are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual. Refer to parts diagram at end of manual. Sort all hardware by like kinds before assembling.

BOX A

Item #	Description	Qty
3	HEADER SUPPORTS	4
4	CROSSBEAMS	2
5a	Right Front Upright	1
5b	Right Rear Upright	1
5c	Left Front Upright	1
5d	Left Rear Upright	1
6	PRESS APRON	1
7	SPREADERS	2
8	LEGS	2
11	JACK PLATE	1
13	JACK HANDLE	1

BOX B

Item #	Description	Qty
1	HEADER	1
2	HEADER PLATES	2
9	LEG BRACES	4
10	SPRINGS	2
12	JACK	1
14	PRESS ROD GUIDES	2
15	PINS	2
16-24	ASSEMBLY HARDWARE	1
25	EYE BOLTS	2
26	ARBOR PLATES	2

FRAME ASSEMBLY:

Step 1: Place the HEADER (#1) between the HEADER PLATES (#2) as shown in Figure 1.

Step 2: Using two BOLTS (#16) and two NUTS (#23), attached the HEADER SUPPORTS (#3) to HEADER PLATES (#2) and HEADER (#1), as shown. Angle away from HEADER (#1) and HEADER PLATES (#2). Hand tighten only.

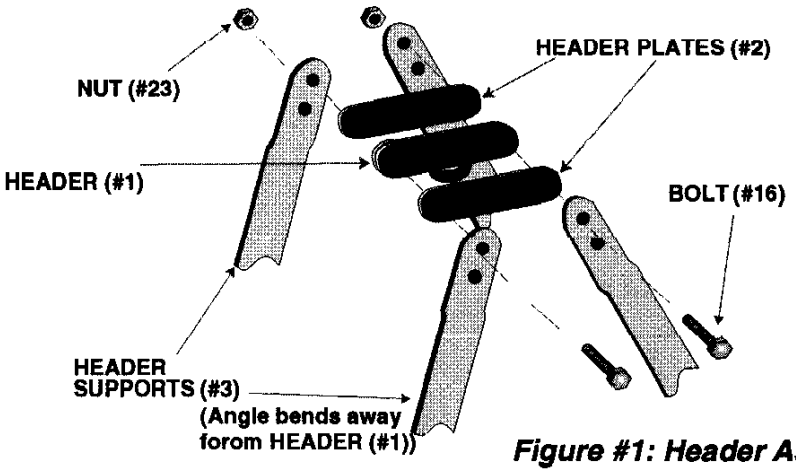


Figure #1: Header Assembly

Step 3: Using four BOLTS (#19), attach the two PRESS ROD GUIDES (#14) to the CROSSBEAMS (#4) in the threaded holes provided in the CROSSBEAMS (#4). Hand tighten only. (See Figure 2). Note: The protective coating used to paint the Shop Press may make it difficult to insert the BOLTS used in this step. If this occurs, first insert the BOLTS (#19) from the bottom side, then insert properly.

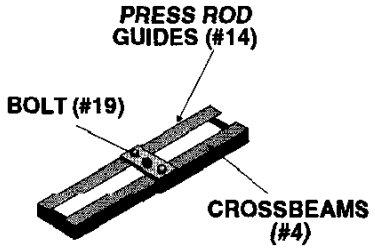


Figure #2: Press Rod Assembly (Step 3)

Step 4: Position the CROSSBEAMS (#4), UPRIGHTS (#5a, b, c, d) and HEADER SUPPORTS (#3) as shown in Figure 3. CROSSBEAMS' (#4) threaded holes should face the top of the press. Note: Make sure UPRIGHT'S (#5a, b, c, d) angles match as per diagram and that the holes align.

Step 5: Using two BOLTS (#17) and two NUTS (#23), secure the Top CROSSBEAM (#4), UPRIGHTS and HEADER SUPPORTS (#3), as shown. Hand tighten only.

Step 6: Using two BOLTS (#18) and two NUTS (#23), secure the CROSSBEAMS (#4) to the UPRIGHTS as shown. Hand tighten only.

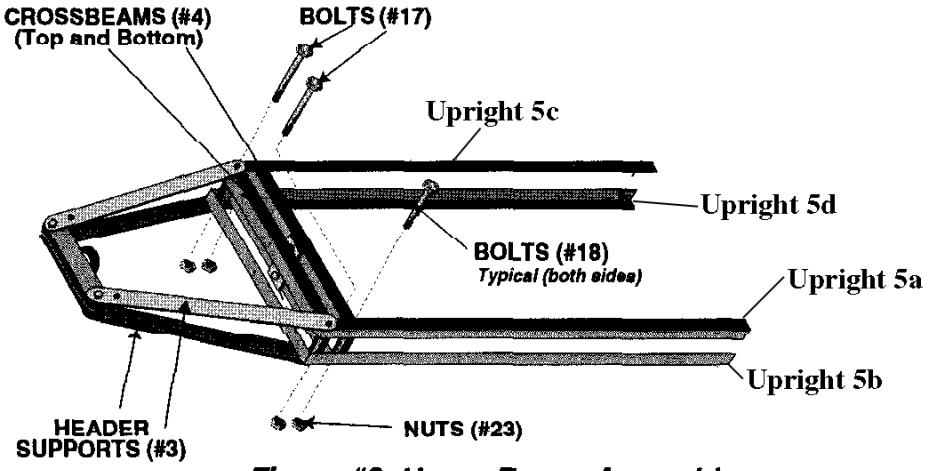


Figure #3: Upper Frame Assembly Steps 4-6

Step 7: Place the SPREADERS (#7) inside the UPRIGHTS as shown in Figure 4 (next page).

Step 8: Using four BOLTS (#19) and four NUTS (#24), secure the SPREADERS (#7) to the UPRIGHTS as shown. Hand tighten only.

Step 9: Using two BOLTS (#19) and two NUTS (#24) per LEG (#8), attach LEG BRACES (#9) to LEGS (#8). Hand tighten only.

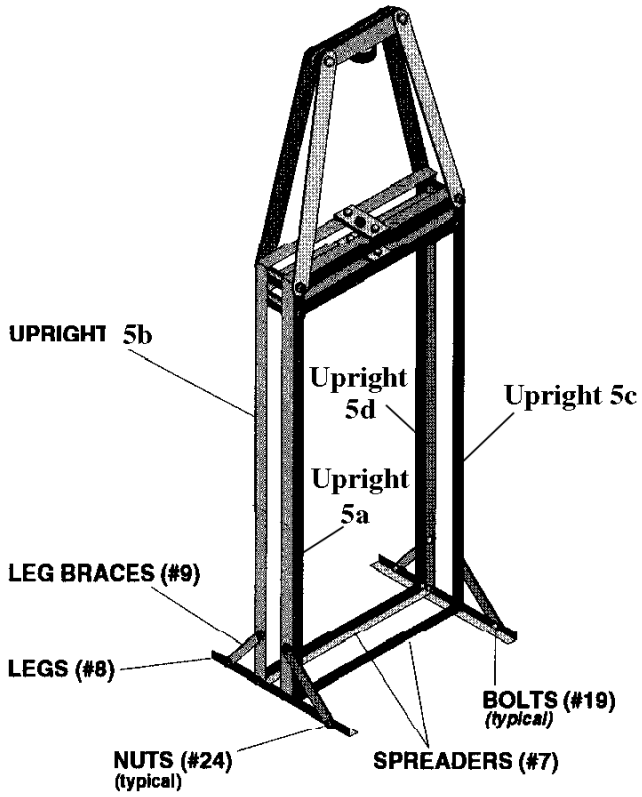


Figure #4: Lower Frame Assembly (Steps 7-10)

Step 10: Using four BOLTS (#19) and four NUTS (#24) per side of Frame, attach LEG BRACES (#9) and LEGS (#8) to the UPRIGHTS. Hand tighten only.

Step 11: Stand the Frame upright on a solid floor or working surface, and verify the squareness of the Frame. Tighten all NUTS and BOLTS that were assembled in steps 7, 8 and 9.

Step 12: Using a straight edge to align the center of the HEADER (#1) to the center of the Frame, tighten all NUTS and BOLTS, except four PRESS ROD GUIDE (#14) BOLTS (#19).

Step 13: Insert two EYE BOLTS (#25) through holes in JACK PLATE (#11) as shown in Figure 5.

Step 14: Place two NUTS (#22) onto the ends of the EYE BOLTS (#25). Thread the nuts (#22) about Ω" onto the EYE BOLTS (#25).

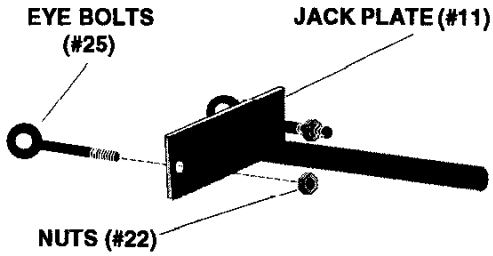


Figure #4: Jack Plate Assembly (Steps 13-14)

Step 15: Slide the Press Rod (part of JACK PLATE (#11)) through the PRESS ROD GUIDES (#14) and ensure that the Press Rod is parallel to the UPRIGHTS. Adjust the position of the PRESS ROD GUIDES (#14) as needed.

Step 16: Tighten the four BOLTS (#19) securing the PRESS ROD GUIDES (#14) to the CROSSBEAMS (#4). Leave the JACK PLATE (#11) in this position.

Step 17: Insert two BOLTS (#21) through the HEADER SUPPORTS (#3) and secure with two NUTS (#24). Tighten securely, but do not bend HEADER SUPPORTS (#3).

Step 18: Hang two SPRINGS (#10) from the two BOLTS (#21) installed in the last step.

Step 19: Lift the JACK PLATE (#11) and attach the EYE BOLTS (#25) to the SPRINGS (#10).

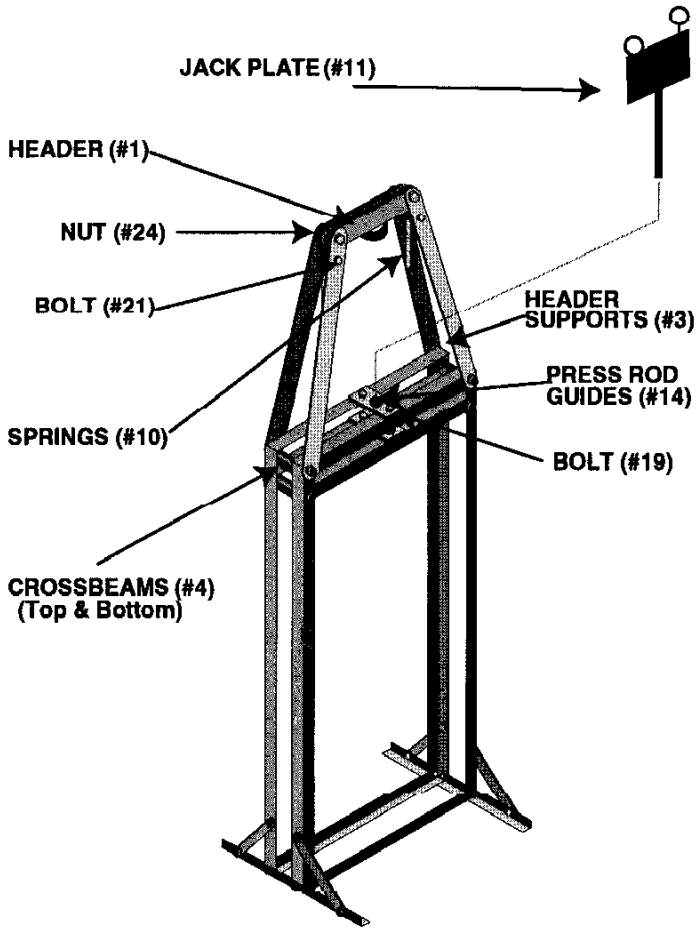


Figure #6: Press Rod Alignment (Steps 15-19)

Step 20: Place the JACK's (#12) Push Rod into the Jack Ring (part of the HEADER (#1) and place the base of the JACK (#12) onto the JACK PLATE (#11). Note: You may have to unscrew the Push Rod in order for it to seat properly in the Jack Ring and achieve proper SPRING (#10) tension.

Step 21: Tighten NUTS (#22) that secure the EYE BOLTS (#25) to the JACK PLATE (#11) making sure that the JACK PLATE (#11) is level.

Step 22: Place the PRESS APRON (#6) into the UPRIGHTS as shown in Figure 6. Align the holes in the PRESS APRON (#6) and UPRIGHTS and insert two PINS (#15) through PRESS APRON (#6) and UPRIGHTS.

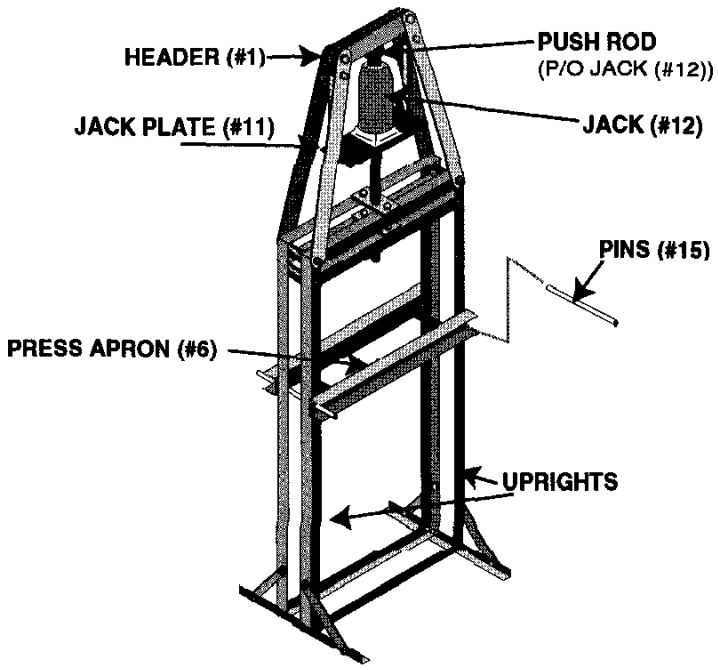


Figure #7: Final Assembly (Steps 20-22)

OPERATION:

The 12-Ton Shop Press comes with two ARBOR PLATES (#26). They have different patterns cut into each side to allow for a variety of uses.

Step 1: Place the two ARBOR PLATES (#26) onto the PRESS APRON (#6).

Step 2: Using the slotted end of the JACK HANDLE (#13), tighten (turn clockwise) the JACK's (#12) relief valve.

Step 3: Insert the JACK HANDLE (#13) into the JACK (#12).

Step 4: Crank the JACK HANDLE (#13) up and down to extend the JACK (#12) and operate the Shop Press.

Step 5: When finished, remove the JACK HANDLE (#13) from the JACK (#12) and loosen (turn counter-clockwise) the JACK's (#12) relief valve. This will return the JACK (#12) to the "closed" position.

WARNING:

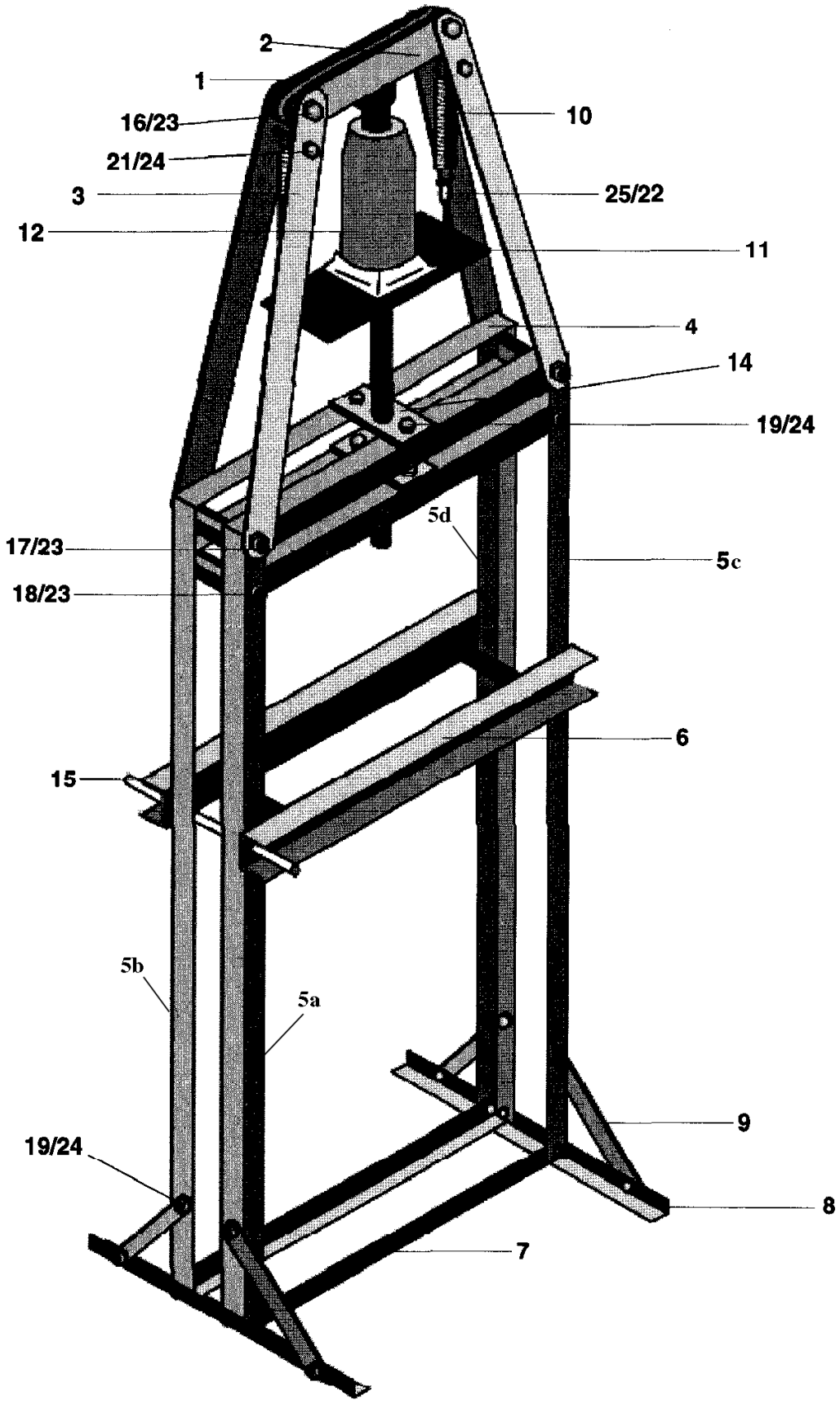
If you detect anything that may indicate a structural failure, stop using the press immediately and inspect it thoroughly

BLEEDING JACK

1. Make sure jack is completely lowered and in upright position.
2. Remove oil fill plug and top off with hydraulic fluid.
3. Raise jack to maximum height.
4. Loosen release valve, and push jack down all of the way.
5. Top off with hydraulic fluid and replace plug.

PARTS LIST:

Item #	Description	Qty	Item #	Description	Qty
1	HEADER	1	14	PRESS ROD GUIDES	2
2	HEADER PLATES	2	15	PIN	2
3	HEADER SUPPORTS	4	16	BOLT (M12 x 45)	2
4	CROSSBEAMS	2	17	BOLT (M12 x 140)	2
5a	Right Front Upright	1	18	BOLT (M12 x 130)	2
5b	Right Rear Upright	1	19	BOLT (M10 x 16)	20
5c	Left Front Upright	1	20	N/A	N/A
5d	Left Rear Upright	1	21	BOLT (M10 x 45)	2
6	PRESS APRON	1	22	NUT (M8)	2
7	SPREADERS	2	23	NUT (M12)	6
8	LEGS	2	24	NUT (M10)	18
9	LEG BRACES	4	25	EYE BOLTS	2
10	SPRINGS	2	26	ARBOR PLATES	2
11	JACK PLATE	1			
12	JACK	1			
13	JACK HANDLE	1			


2
1
16/23
21/24
3
12
10
25/22
11
4
14
19/24
5d
17/23
5c
18/23
6
15
5b
5a
19/24
9
8
7

BOTTLE JACK PARTS LIST & DIAGRAM

No.	Description
1.	Elevating Screw
2.	Cap
3.	Ram O-Ring
4.	Top Sealing Gasket
5.	Ram
6.	Ram Rubber Cup
7.	Cylinder
8.	Housing
9.	Oil Filler Plug
10.	Lower Sealing Gasket
11.	Base
12.	Valve Release Screw
13.	Release Valve O-Ring
14.	Release Valve Ball Bearing
15.	Pump Valve Assembly
16.	Pump Cylinder Outer O-Ring
17.	Pump Cylinder washer
18.	Pump Cylinder Inner O Ring (back-up)
19.	Pump Cylinder
20.	Pin
21.	Spit Cotter Pin
22.	Plunger and Fulcrum Assembly
23.	Handle Extension 1
24.	Handle Extension 2
25.	Handle Extension 3